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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,965	08/19/2006	Christophe Dumousseaux	09354.0009	9332

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EXAMINER	
SOROUSH, LAYLA	
ART UNIT	PAPER NUMBER
1627	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/566,965	DUMOUSSEAUX ET AL.
	Examiner	Art Unit
	LAYLA SOROUSH	1627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 May 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10 and 12-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10 and 12-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)	
1) ☒ Notice of References Cited (PTO-892)	4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) ☐ Notice of Informal Patent Application
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.	6) ☐ Other: _____.

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 25, 2010. Claims 1-10, and 12-15 are pending.

The following rejections are made:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-5, 7-10, and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kadokura et al. (4882143) in view of Hall et al. (US 20020009564 A1), and Mongiat et al. (US 7,101,536 – previously presented).

Kadokura et al. teach cosmetic compositions such as make-up formulations comprising a lamina comprising a matrix substance (e.g. silicon dioxide) and a finely divided metal or metal compound dispersed therein (e.g. titanium dioxide, zinc oxide, silver powder, etc.). The average thickness of the lamina is 0.1-5 microns, the average size is 1-500 microns and the aspect ratio is 3-100. The lamina of Kadokura are

calcined at ranges between 300 C to 700 C. The same silicon base porous particles are taught therefore, the property of "aspect ratio" claimed is met by the teachings of the prior art.

Hall et al. is solely used to show that silicone particles calcined at about 300 C to about 400 C, produce porous particles (col 3 lines 25-40).

Kadokura et al. does not teach the spherical powder of Claim 12.

However, Mongiat et al. teach using spherical powders of the instant claims as SPF enhancers in UV protective compositions. See col. 31, lines 40-47. An additional beneficial effect provided by some spherical powders is a soft feel during spreading and skin mattifying. See col. 31, lines 50-55.

Therefore, it would have been *prima facie* obvious to one having ordinary skill in the art at the time the invention was made to modify the UV protective compositions of Kadokura et al. such that to use spherical powders. One having ordinary skill in the art would have been motivated to do this to obtain better UV protection as well as to improve the skin feel and mattifying properties of cosmetic formulations as suggested by Mongiat et al.

With respect to Claim 7, the reference teaches. nanoparticles of metal or metal compounds such as silver powder, titanium dioxide and other substance, dispersed within the matrix particles (see above), but does not explicitly teach the claimed "combination of silver nanoparticles and titanium dioxide nanoparticles". However, making a combination of the disclosed compounds is obvious modification of the prior art and within the skill of the ordinary practitioner. One having ordinary skill in the art

would have been motivated to do this to obtain the desired UV screening ability of the lamina.

With respect to Claim 10, the reference does not teach the claimed oil absorbability of the particles. However, since the particles of Kadokura et al. are porous and are used in skin care formulations such as face powder and foundations, it would have been *prima facie* obvious to one having ordinary skill in the art at the time the invention was made to adjust the oil absorbability of the particles. One having ordinary skill in the art would have been motivated to do this to obtain a mattifying effect of the formulations.

Claim 15 is a product by process claim. It is well settled in patent law that product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. See MPEP § 2123. The court in In re Thorpe held, "even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." See 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). In this case, the method of making the composition as claimed does not render structural limitations to the claimed composition. Thus, the processes are not given patentable weight. In claim 15, the formulation of the porous silica particles are "formed by a sol-gel method" is not given patentable weight.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kadokura et al. (4882143) and Mongiat et al. (US 7,101,536 – previously presented), as applied to claims1-5, 7-10, 12-14 and 15 above, and further in view of Reinehr et al. (WO 01/43714).

Kadokura et al. and Mongiat et al. are as applied above.

Kadokura et al. and Mongiat et al. do not teach the fluorescent substances of Claim 6.

However, Reinehr et al. teach using fluorescent substances of the instant claim in UV protecting skin care compositions. See Abstract; pp. 1-11. The fluorescent substances are used to lighten the skin, to protect the skin against UV radiation and to improve the appearance of cosmetic formulations. See pp. 1, 17.

Therefore, it would have been *prima facie* obvious to one having ordinary skill in the art at the time the invention was made to modify the particles of Kadokura et al. such that to use fluorescent substances in addition to or instead of metal oxides dispersed in the matrix. One having ordinary skill in the art would have been motivated to do this to obtain UV protective and skin lightening effect as well as to improve the appearance of cosmetic formulations as suggested by Reinehr et al.

Claims 1-5, 7-10, and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roulier et al. (6045814) in view of Hall et al. (US 20020009564 A1), and Mongiat et al. (US 7,101,536 – previously presented).

Roulier et al. teach a cosmetic or dermatological composition comprising at least one filler is selected from inorganic and organic fillers of lamellar and spherical

structures, which are compactable or not readily compacted and the inorganic spherical fillers are selected from zinc oxides, titanium oxides, precipitated calcium carbonate, magnesium carbonate and hydrocarbonate, non-porous spherical silica, hydroxyapatite, silica microspheres with open or hollow porosity, optionally impregnated with a cosmetic active agent, and glass and ceramic microcapsules.

Roulier et al. does not teach the spherical powder of Claim 12.

However, Mongiat et al. teach using spherical powders of the instant claims as SPF enhancers in UV protective compositions. See col. 31, lines 40-47. An additional beneficial effect provided by some spherical powders is a soft feel during spreading and skin mattifying. See col. 31, lines 50-55.

Therefore, it would have been *prima facie* obvious to one having ordinary skill in the art at the time the invention was made to modify the UV protective compositions of Roulier et al. such that to use spherical powders. One having ordinary skill in the art would have been motivated to do this to obtain better UV protection as well as to improve the skin feel and mattifying properties of cosmetic formulations as suggested by Mongiat et al.

With respect to Claim 7, the reference teaches. nanoparticles of metal or metal compounds such as silver powder, titanium dioxide and other substance, dispersed within the matrix particles (see above), but does not explicitly teach the claimed "combination of silver nanoparticles and titanium dioxide nanoparticles". However, making a combination of the disclosed compounds is obvious modification of the prior art and within the skill of the ordinary practitioner. One having ordinary skill in the art

would have been motivated to do this to obtain the desired UV screening ability of the lamina.

With respect to Claim 10, the reference does not teach the claimed oil absorbability of the particles. However, since the particles of Kadokura et al. are porous and are used in skin care formulations such as face powder and foundations, it would have been *prima facie* obvious to one having ordinary skill in the art at the time the invention was made to adjust the oil absorbability of the particles. One having ordinary skill in the art would have been motivated to do this to obtain a mattifying effect of the formulations. Claim 15 is a product by process claim. It is well settled in patent law that product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. See MPEP § 2123. The court in In re Thorpe held, "even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." See 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). In this case, the method of making the composition as claimed does not render structural limitations to the claimed composition. Thus, the processes are not given patentable weight. In claim 15, the formulation of the porous silica particles are "formed by a sol-gel method" is not given patentable weight.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roulier et al. (6045814) and Mongiat et al. (US 7,101,536 – previously presented), as applied to claims1-5, 7-10, 12-14 and 15 above, and further in view of Reinehr et al. (WO 01/43714).

Roulier et al. and Mongiat et al. are as applied above.

Roulier et al. and Mongiat et al. do not teach the fluorescent substances of Claim 6.

However, Reinehr et al. teach using fluorescent substances of the instant claim in UV protecting skin care compositions. See Abstract; pp. 1-11. The fluorescent substances are used to lighten the skin, to protect the skin against UV radiation and to improve the appearance of cosmetic formulations. See pp. 1, 17.

Therefore, it would have been *prima facie* obvious to one having ordinary skill in the art at the time the invention was made to modify the particles of Kadokura et al. such that to use fluorescent substances in addition to or instead of metal oxides dispersed in the matrix. One having ordinary skill in the art would have been motivated to do this to obtain UV protective and skin lightening effect as well as to improve the appearance of cosmetic formulations as suggested by Reinehr et al.

Response to Arguments

Applicant's arguments filed on May 25, 2010 have been considered but are not persuasive.

With respect to the argument that Kadokura et al. does not teach the active

substance incorporated into the lamina, the Examiner states the reference teaches “the resulting lamina was calcined at 450.degree. C. for 30 minutes to obtain a lamina having an average size of 60 microns and an average thickness of 0.9 microns consisting of laminar silica and superfinely divided titania dispersed therein."

The Examiner states when the optically active substance is within the lamina it would obviously not come into direct contact with the skin as argued.

The Hall reference was solely used to show silicone particles calcined at about 300 C to about 400 C, produce porous particles (col 3 lines 25-40).

The Mongiat reference was incorporated because Kadokura et al. does not teach the spherical powder of Claim 12. However, Mongiat et al. teach using spherical powders of the instant claims as SPF enhancers in UV protective compositions. See col. 31, lines 40-47. An additional beneficial effect provided by some spherical powders is a soft feel during spreading and skin mattifying. See col. 31, lines 50-55.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Examiner states that Hall et al. is solely used to show that silicone particles calcined at about 300 C to about 400 C, produce porous particles (col 3 lines 25-40); Mongiat et al. was solely

relied upon due to the teaching that spherical powders of the instant claims as SPF enhancers in UV protective compositions. See col. 31, lines 40-47. An additional beneficial effect provided by some spherical powders is a soft feel during spreading and skin mattifying. See col. 31, lines 50-55.; and Reinehr et al. teach using fluorescent substances of the instant claim in UV protecting skin care compositions. See Abstract; pp. 1-11. The fluorescent substances are used to lighten the skin, to protect the skin against UV radiation and to improve the appearance of cosmetic formulations. See pp. 1, 17. It would have been *prima facie* obvious to one having ordinary skill in the art at the time the invention was made to modify the particles of Kadokura et al. such that to use fluorescent substances in addition to or instead of metal oxides dispersed in the matrix. One having ordinary skill in the art would have been motivated to do this to obtain UV protective and skin lightening effect as well as to improve the appearance of cosmetic formulations as suggested by Reinehr et al.

Conclusion

No claims allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Layla Soroush whose telephone number is (571)272-5008. The examiner can normally be reached on Monday through Friday from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan, can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is

571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/SREENI PADMANABHAN/

Supervisory Patent Examiner, Art Unit 1627